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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/298,910	04/26/1999	NORIYOSHI SONETAKA	Q54131	2573
7590 08/19/2005			EXAMINER	
SUGHRUE MION ZINN MACPEAK & SEAS			WEST, LEWIS G	
2100 PENNSYLVANIA AVENUE N W			ART UNIT PAPER NUMBER	
WASHINGTON, DC 200373202			2682	

DATE MAILED: 08/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/298,910

Applicant(s)

SONETAKA, NORIYOSHI

Examiner

Lewis G. West

Art Unit

2682

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 July 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10,12,14 and 16-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10,12,14 and 16-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Arguments

Applicant's arguments with respect to claim 10, 16 and 18-24 have been considered but are moot in view of the new ground(s) of rejection. Applicant's amendment necessitated new grounds of rejection, making this rejection final.

Regarding claim 12, it is well known and established that a mobile switching center is a telephone exchange. West does disclose digit analysis. Therefore applicant's arguments are unpersuasive.

Regarding claim 14, applicant has not provided support for the subject matter added, and the rejection is maintained.

Regarding claim 17, West transmits the signals to a shift register. All limitations are met by West and the rejection stands.

Claim Rejections - 35 USC § 112

Claim 14 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. While there is support for a private branch exchange in the system, no support is provided for transmitting a dialing signal to a private branch exchange each time a dialing signal is produced, only for sending these signals to the base station or base station controller, and there is not support for digit analysis at the private branch exchange. Correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 17 is rejected under 35 U.S.C. 102(b) as being anticipated by West, Jr. et al (US 4,658,⁰⁹⁶~~906~~).

Regarding claim 17, West discloses a radio access method comprising the steps of: producing dialing signals when a key of a dial pad is pushed; transmitting dialing signals each time they are produced; and deciding at said subscriber terminal whether a dialing signal represents a final digit of a dialed telephone number or not. (Column 7 lines 1-43)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 10, 16 and 18-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bilgic (US 5,884,148) in view of Sandler (US 5,983,117).

Regarding claim 10, Bilgic discloses a radio access system comprising: means for producing dialing signals comprising a telephone set having a dial pad with keys, wherein a

Art Unit: 2682

dialing signal is generated each time a key of said dial pad is pushed (col. 10 line 22-col. 11 line 24); a base station control station (113) in radio communication with said means for producing dialing signals through a base station; said base station including means for deciding whether a received dialing signal represents a final digit of a dialed telephone number or not. (Col. 11 line 39-48) but does not expressly disclose sending each dialed digit to the base station. Sandler discloses means for transmitting the dialing signal to the said base station control station each time a dialing signal is generated (Col. 3 lines 21-42; Col. 8 lines 9-27), wherein when a handset of the telephone set is removed from its switch and the keys of the dial pad are pushed while said base station controller or said base station is performing a control access to establish a link. storing a set of dialing signals and then transmitting the stored set of dialing signals to said base station control station after the link has been established.(Col. 13 line 33-57) Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to send digits to the base station controller, as analysis may take place higher in the system, as demonstrated by Sandler, which would centralize processing and avoid the cost of having multiple equipment at multiple locations to perform the same function.

Regarding claim 16, Bilgic discloses a radio access method comprising the steps of: producing a single digit dialing signal when a key of a dial pad is pushed; and deciding at said base station whether a received single digit dialing signal represents a final digit of a dialed telephone number or not. (Col. 11 lines 8-48) but does not expressly disclose sending each dialed digit to the base station. Sandler discloses means for transmitting the dialing signal to the said base station control station each time a dialing signal is generated (Col. 3 lines 21-42; Col. 8 lines 9-27), wherein when a handset of the telephone set is removed from its switch and the keys

Art Unit: 2682

of the dial pad are pushed while said base station controller or said base station is performing a control access to establish a link, storing a set of dialing signals and then transmitting the stored set of dialing signals to said base station control station after the link has been established. (Col. 13 line 33-57) Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to send digits to the base station controller, as analysis may take place higher in the system, as demonstrated by Sandler, which would centralize processing and avoid the cost of having multiple equipment at multiple locations to perform the same function.

Regarding claim 18, the combination of Bilgic and Sandler discloses the radio access system according to claim 10, wherein said base station opens a communications channel after deciding that a received dialing signal represents the final digit of the dialed telephone number. (Bilgic col. 8 line 21-42)

Regarding claim 19, the combination of Bilgic and Sandler discloses the radio access system according to claim 10, wherein said means for deciding comprises an inter-digit timer and a means for determining that a dialing signal has not been received for a fixed period of time. (Bilgic col. 8 line 21-42)

Regarding claim 20, the combination of Bilgic and Sandler discloses the radio access system according to claim 10, wherein said means for deciding comprises an inter-digit timer and a means for determining that a dialing signal has not been received for a variable period of time. (Bilgic col. 8 line 21-42)

Regarding claim 21, the combination of Bilgic and Sandler discloses the radio access system according to claim 10, wherein said means for deciding comprises a means for counting a fixed number of said dialing signals. (Bilgic col. 8 line 21-42)

Art Unit: 2682

Regarding claim 22, the combination of Bilgic and Sandler discloses the radio access system according to claim 10, wherein said means for deciding comprises a means for counting a variable number of said dialing signals. (Bilgic col. 8 line 21-42)

Regarding claim 23, the combination of Bilgic and Sandler discloses the radio access system according to claim 10, wherein said base station and said base station control station are connected to each other in a point-to-point access configuration. (Bilgic Col 4 lines 4-23)

Regarding claim 24, the combination of Bilgic and Sandler discloses the radio access system according to claim 10, wherein said base station and said base station control station are connected to each other in a point-to-multipoint access configuration. (Bilgic Col 4 lines 4-23)

Claims 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sandler in view of West, Jr. et al.

Regarding claim 12, Sandler discloses a radio access system comprising: means for producing dialing signals; comprising a telephone set having a dial pad with keys, wherein a dialing signal is generated each time a key of said dial pad is pushed; a telephone exchange (MSC) in radio communication with said means for producing dialing signals through a base stations control station; and means for transmitting the dialing signal to said telephone exchange each time the dialing signal is generated (Col. 3 lines 21-42; Col. 8 lines 9-27), but does not expressly disclose digit analysis at the dialing means. West discloses means for producing dialing signals including means for deciding whether a received dialing signal represents a final digit of a dialed telephone number or not. (Column 7 lines 1-43) Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to analyze digits at a dialing

Art Unit: 2682

means, allowing for a particular terminal to be programmed with local dialing procedures, which may be useful in making an emergency call.

Claims 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sandler in view of West, Jr. et al.

Regarding claim 14, Sandler discloses a radio access system comprising: means for producing dialing signals; comprising a telephone set having a dial pad with keys, wherein a dialing signal is generated each time a key of said dial pad is pushed; a telephone exchange in radio communication with said means for producing dialing signals through a base station control station; and means for transmitting the dialing signal to said private branch telephone exchange each time the dialing signal is generated (Col. 3 lines 21-42; Col. 8 lines 9-27), but does not expressly disclose digit analysis at the dialing means or that the telephone exchange is a private branch exchange. West discloses means for producing dialing signals including means for deciding whether a received dialing signal represents a final digit of a dialed telephone number or not, (Column 7 lines 1-43) Further, Bilgic discloses radio system using digit analysis comprising a private branch exchange. (Col. 21 lines 46-57). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to analyze digits at a dialing means, allowing for a particular terminal to be programmed with local dialing procedures, which may be useful in making an emergency call, and it would have further been obvious to communicate with a private branch exchange to allow multiple dialing means to connect through a common radio connection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lewis G. West whose telephone number is 571-272-7859. The examiner can normally be reached on Monday-Friday 7:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nick Corsaro can be reached on 571-272-7876. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2682

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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